

IN THE CLAIMS

Please add claim 24 as indicated:

1-8. (cancelled)

9. (previously amended) A system comprising:

a volatile system memory;

a non-volatile memory;

a network adapter, the network adapter including:

a non-system memory capable of temporarily storing a packet received by the network adapter; and

a microcontroller capable of evaluating the packet received by the network adapter; and

a system bus connecting the network adapter to the volatile system memory, wherein if the microcontroller determines that the packet is destined for the system's non-volatile memory, then the microcontroller bypasses the system bus for the volatile system memory and directly communicates with the non-volatile memory to transfer the packet from the non-system memory in the network adapter to the system's non-volatile memory, and wherein if the microcontroller does not determine that the packet is destined for the system's non-volatile memory, then the microcontroller transfers the packet from the non-system memory in the network adapter to the volatile system memory.

10. (previously amended) The system of claim 9, further comprising:

a Small Computer System Interface (SCSI) bus connecting the network adapter to the system's non-volatile memory, wherein a transfer of the packet from the non-system memory in the network adapter to the system's non-volatile memory does not occur via the system bus.

11. (previously amended) The system of claim 10, wherein the non-system memory in the network adapter has a first port coupled to a Local Area Network (LAN), a second port coupled to a system bus, and a third port coupled to a SCSI bus.

12. (previously presented) The system of claim 9, wherein the system's non-volatile memory is a hard disk in a hard disk drive that has a SCSI interface to the SCSI bus.

13. (previously presented) The system of claim 9, wherein the microcontroller evaluates the packet by examining in the packet:

an address source;

an address destination; and

a port number that indicates which transfer protocol is used by the packet, such that only packets having a pre-determined source and address destination and using a pre-determined port are transferred from the non-system memory in the network adapter to the system's non-volatile memory.

14. (previously presented) The system of claim 9, wherein the microcontroller locally stores a listing of address sources, address destinations and port numbers that authorize the packet to be routed directly to the system's non-volatile memory.

15. (previously presented) The system of claim 9, wherein the packet is received from a network.

16. (cancelled)

17. (previously presented) A system for downloading a data file from a web server to a user workstation through a network to which is connected said user workstation, said user workstation including a hard disk for storing a data file being transferred over a Small Computer System Interface (SCSI) bus, said user workstation comprising:

a dual-port memory for temporarily storing said data file, said dual-port memory having:

an input port,

a first output port and a second output port,

~~a network logic unit interconnected between said network and said input~~

port for transmitting said data file to said dual-port memory,

a bus interface interconnected between said first output port and a system bus for transmitting a data file from said dual-port memory to a main memory, and

a SCSI logic unit interconnected between said second output port and said SCSI bus for transmitting a data file from said dual port memory directly to said hard disk over said SCSI bus, thus bypassing said system bus.

18. (previously presented) The system according to claim 17, wherein said user workstation comprises a microcontroller for selecting the output port of the dual-port memory used to transmit the data file.

19. (previously presented) A system having a network interface, the network interface comprising:

a network interface logic unit composed of:

a network connector, and

a network controller having a Direct Memory Access (DMA) unit;

a system bus interface;

a non-system bus interface;

a three-port buffer memory having a first port coupled to the network interface logic unit, a second port coupled to the system bus interface, and a third port coupled to the non-system bus interface, wherein the three-port buffer memory is not memory mapped to a non-volatile memory; and

a dedicated microcontroller coupled to the three-port memory, wherein the dedicated microcontroller initializes the DMA unit with a master address that causes an incoming packet of data from a network to be stored locally in the three-port buffer memory, and wherein the non-system bus interface, under the control of the dedicated microcontroller, transfers the packet of data stored in the three-port buffer memory to a non-volatile memory.

~~20. (previously presented) The system of claim 19, wherein the non-system bus interface is a~~
Small Computer System Interface (SCSI) bus interface.

21. (previously presented)The system of claim 20, wherein the incoming packet of data is never transmitted across a system bus in the system nor is the incoming packet of data ever accessed by a central processor in the system until after the incoming packet of data is stored in the non-volatile memory by the SCSI bus interface.

22. (previously presented)The system of claim 21, wherein the microcontroller informs the central processor in the system of the storage and address of the incoming packet of data in the non-volatile memory.

23. (previously presented)The system of claim 22, wherein the central processor subsequently alerts a File Transfer Protocol (FTP) application of the location of the newly stored packet of data.

24. (new) A system for downloading a data file from a web server to a user workstation through a local area network (LAN) that is connected to the user workstation, the user workstation including a hard disk for storing a data file being transferred over a Small Computer System Interface (SCSI) bus, the user workstation comprising:

a network adapter having:

a dual-port memory for temporarily storing a data file, the

dual-port memory having a first, second and third port;

a system bus interface coupling the first port with a system bus in the user workstation;

a LAN logic unit coupling the LAN to the second port of the multi-port memory;

a SCSI logic unit coupling the SCSI bus to the third port of the dual-port memory; and

a microcontroller coupled to the dual-port memory, wherein the microcontroller selectively routes incoming data files from the LAN to either the system bus interface or the SCSI logic unit via the dual-port memory, and wherein the microcontroller selectively routes outgoing data files from the hard disk to the SCSI bus to the SCSI logic unit to the dual-port memory to the dual-port memory to the LAN logic unit to the LAN, thus bypassing

the system bus interface of the user workstation when sending data files from the hard disk to the LAN.